

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: VANDENTOP et al.	) Confirmation No.: 9242
)
Application No.: 10/667,694	) Group Art Unit: 2841
)
Filing Date: 9/22/2003	) Examiner: Tuan T. Dinh
)
For: INTEGRATED CIRCUIT	) REASONS IN SUPPORT OF PRE-
DIE/PACKAGE INTERCONNECT	) APPEAL BRIEF REQUEST FOR
	) REVIEW
)
	) Attorney Docket No.: P16922
)
	) PTO Customer Number 28062
	) Buckley, Maschoff & Talwalkar LLC
	) Attorneys for Intel Corporation
	) 50 Locust Avenue
	) New Canaan, CT 06840
)

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicants submit the following reasons in support of the Pre-Appeal Brief Request for Review filed herewith:

Reasons begin on page 2 of this paper.

REASONS

Applicants submit the following reasons as evidence of clear error in the outstanding final rejection of independent claims 1 and 19.

Reconsideration is respectfully requested.

Notwithstanding the reasons set forth herein, Applicants note with appreciation the courtesy shown by the Examiner in a telephone interview with Mark Steinberg on April 25, 2007 during which the Examiner discussed the Examiner's reasons for the final rejection of independent claim 1. No agreement was reached.

Claim 1

The outstanding Final Office Action rejects independent claims 1 and 19 as being anticipated by U.S. Patent No. 6,469,494 ("Cuevas").

Reconsideration is respectfully requested.

Independent claim 1 recites an apparatus comprising: a plurality of pliant conductive elements, a first end of one of the plurality of pliant conductive elements to be electrically coupled to a first electrical contact of an integrated circuit substrate and a second end of the one of the plurality of pliant conductive elements to be electrically coupled to a second electrical contact of an integrated circuit die; and a pliant material in which the plurality of pliant conductive elements are disposed, the pliant material comprising a pliant dielectric material.

Cuevas does not teach or suggest the apparatus of independent claim 1.

Cuevas discloses a programmable connector 20 that includes an insulating substrate 26 and an array of programming regions 30 (col. 3, lines 50-53). Each programming region 30 includes a conductive portion 34, a conductive portion 42 and a support region 62 (col. 3, lines 54-59). The operator activates a programming region 30 by using a pliant conductive material, such as a solution dispensed in the form of an "ink" from a "pen," or pen-type device, to "write"

a layer of material, shown in the form of a circle, or dot 50, over support region 62 of programming region 30 in FIG. 5 (col. 4, lines 42-47).

However, Cuevas does not teach or suggest an apparatus that includes the combination of (1) a plurality of pliant conductive elements, a first end of one of the plurality of pliant conductive elements to be electrically coupled to a first electrical contact of an integrated circuit substrate, a second end of the one of the plurality of pliant conductive elements to be electrically coupled to a second electrical contact of an integrated circuit die, and (2) a pliant material in which the plurality of pliant conductive elements are disposed, wherein the pliant material includes a pliant dielectric material, as recited in independent claim 1.

Notably, although Cuevas discloses a type of pliant conductive material, i.e., a solution dispensed in the form of an "ink" from a "pen," or pen-type device, to "write" a layer of material, shown in the form of a circle, or dot 50, no portion of such pliant conductive material appears to be disposed in a pliant material that comprises a pliant dielectric material. In that regard, the pliant conductive material is disposed over, not in, the support region 62. Consequently, even if the support region 62 constitutes a type of pliant material, as asserted in the Office Action, and even if the pliant conductive material (i.e., the solution dispensed in the form of an "ink" from a "pen," or pen-type device, to "write" a layer of material, shown in the form of a circle, or dot 50) constitutes a pliant conductive element, as asserted in the Office Action, such pliant conductive element is not disposed in the asserted pliant material. As stated above, the pliant conductive material is disposed over, not in, the support region 62.

For at least the reason above, Cuevas does not teach or suggest the apparatus of independent claim 1.

Reconsideration and allowance of independent claim 1 are respectfully requested.

Claim 19

Independent claim 19 recites a device comprising: an integrated circuit die comprising a first plurality of electrical contacts; an integrated circuit substrate comprising a second plurality

of electrical contacts; and an interconnect patch comprising a plurality of pliant conductive elements, a first end of one of the plurality of pliant conductive elements in physical contact with one of the first plurality of electrical contacts and a second end of the one of the plurality of pliant conductive elements in physical contact with one of the second plurality of electrical contacts.

Cuevas does not teach or suggest the device of Claim 19.

Indeed, Cuevas does not teach or suggest a device that includes the combination of (1) an integrated circuit die comprising a first plurality of electrical contacts, (2) an integrated circuit substrate comprising a second plurality of electrical contacts, and (3) an interconnect patch comprising a plurality of pliant conductive elements, wherein a first end of one of the plurality of pliant conductive elements is in physical contact with one of the first plurality of electrical contacts and a second end of the one of the plurality of pliant conductive elements is in physical contact with one of the second plurality of electrical contacts, as recited in independent claim 19.

Notably, neither conductive portion 34 nor conductive portion 42 constitutes an electrical contact of an integrated circuit die. Therefore, even if the conductive material (i.e., the solution dispensed in the form of an "ink" from a "pen," or pen-type device, to "write" a layer of material, shown in the form of a circle, or dot 50) constitutes a pliant conductive element, as asserted in the Office Action, such pliant conductive element is not in physical contact with an electrical contact of an integrated circuit die. As stated above, neither conductive portion 34 nor conductive portion 42 constitutes an electrical contact of an integrated circuit die.

For at least the reason above, Cuevas does not teach or suggest the device of independent claim 19.

Reconsideration and allowance of independent claim 19 are respectfully requested.

For at least the reasons above, it is submitted that the entire application is in condition for allowance. Accordingly, reconsideration and allowance of the present application are respectfully requested.

Respectfully submitted,

June 8, 2007
Date

/MS/
Mark Steinberg
Registration No. 40,829
Buckley, Maschoff & Talwalkar LLC
Attorneys for Intel Corporation
50 Locust Avenue
New Canaan, CT 06840
(203) 972-0006, ext. 1014